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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/727,958

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Shogo Kiyota

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27799

7590

02/22/2008

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EXAMINER

DAHIMENE, MAHMOUD

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/727,958	<b>Applicant(s)</b> KIYOTA ET AL.	
	<b>Examiner</b> MAHMOUD DAHIMENE	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-4, 31-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103 Withdrawn***

Applicant has provided a statement indicating "Both Wada and Kurachi have been assigned to Nippon Sheet Glass Co., Ltd., which is also the assignee of the present application. Thus, at the time the claimed invention was made, the subject matter of Wada and Kurachi and the claimed invention were owned by the same person or subject to an obligation of assignment to the same person. Moreover, the subject matter of Wada or Kurachi qualifies as prior art only under 35 U.S.C. 102(e) (note the present application is entitled to a foreign priority date of June 4, 2001, and a verified English translation of the priority document was submitted to the USPTO on February 27, 2007). As a result, the Examiner cannot use Wada or Kurachi to form a rejection under 35 U.S.C. 103(a) to reject the claims of the present application (see 35 U.S.C. 103(c)(1))."

In view of the foregoing, the 35 U.S.C. 103(a) rejection of claim 1 is withdrawn.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the preamble recites "A method of manufacturing a

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transparent substrate that is to have a transparent conductive film formed on a surface thereof", however, in line 5, the limitation "controlling a surface smoothness of a surface of the transparent conductive film" is also recited. It is not clear if the transparent conductive film is part of the transparent substrate which is manufactured or if the transparent conductive film is the one describe in the preamble. Claims 3-4, 31-40, are also rejected under 35 U.S.C. 112, second paragraph because they depend on claim 1.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 1, and all the depending claims are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a surface smoothness of the surface of the transparent substrate to satisfy  $2 \text{ nm} \leq R_z \leq 4 \text{ nm}$ , does not reasonably provide enablement for  $0 \text{ nm} \leq R_z < 2 \text{ nm}$ . The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to support that the invention is commensurate in scope with these claims. The presence of working examples of a smoothness of the surface of the transparent substrate to satisfy  $2 \text{ nm} \leq R_z \leq 4 \text{ nm}$  clearly shows the advantage of such a method (Table 1, Table 2, examples 1-7), however, there is no working example showing that, the range of  $0 \text{ nm} \leq R_z < 2 \text{ nm}$  is effectively attained by the polishing/treatments of the substrate.

5. In addition, the endpoint of  $R_z = 0$  appears to be impossible to attain because the definition of  $R_z$ , provided in applicant's specification "The 10-point mean roughness  $R_z$ , which represents the surface smoothness, is the difference between the mean value of the heights of the highest to fifth highest peaks over a sampled portion relative to a reference height, and the mean value of the heights of the deepest to fifth deepest troughs over the sampled portion relative to the reference height." (paragraph 0045), should include, in the atomic scale, the space between consecutive atoms on the surface, which are the deepest points on the surface as opposed to the position of the atoms which occupy the highest points on the surface, therefor peaks and valleys at the atomic scale renders  $R_z$  necessarily greater than zero. The same applies to the lower endpoint of the range in the limitation of "controlling a surface smoothness of a surface of the transparent conductive film to satisfy  $0 \text{ nm} \leq R_z \leq 8 \text{ nm}$ "

6. Claims 3-4, 31-40, are also rejected under 35 U.S.C. 112, first paragraph because they depend on claim 1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHMOUD DAHIMENE whose telephone number is (571)272-2410. The examiner can normally be reached on week days from 8:00 AM. to 5:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD.

/Nadine G Norton/  
Supervisory Patent Examiner, Art Unit 1792